Amendments to the Claims:

Please cancel claims 1-48 and 50-54 without prejudice.

Please amend claim 49 as follows.

Please add new claims 55-73.

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-48 **(Cancelled)**

49. **(Currently amended)** A method for diagnosing cancer comprising:
a) determining the expression of a cytochrome B5 gene ~~one or more genes comprising a nucleic acid sequence selected from the group consisting of the human genomic and mRNA sequences outlined in Tables 1-336,~~ in a first tissue type of a first individual; and
b) comparing said expression of the cytochrome B5 gene ~~said gene(s)~~ from a second normal tissue type from said first individual or a second unaffected individual;
wherein a difference in said expression indicates that the first individual has cancer.

Claims 50-54 **(Cancelled)**

55. **(New)** A method for diagnosing colon, breast or prostate cancer comprising comparing a level of cytochrome B5 mRNA in a patient sample comprising colon, breast or prostate tissue to the level of the cytochrome B5 mRNA in a normal control; wherein an increase of at least 50% from the level in the patient sample relative to the normal control indicates that the patient has or is predisposed to colon, breast or prostate cancer.

56. **(New)** The method of claim 55 wherein the cytochrome B5 mRNA comprises a nucleotide sequence at least 95% identical to SEQ ID NO:869.

57. (New) The method of claim 55 wherein the cytochrome B5 mRNA comprises a nucleotide sequence at least 98% identical to SEQ ID NO:869.

58. (New) The method of claim 55 wherein the cytochrome B5 mRNA comprises SEQ ID NO:869.

59. (New) The method of claim 55 wherein an increase of at least 100% from the level of the cytochrome B5 mRNA in the patient sample relative to the normal control indicates that the patient has or is predisposed to colon, breast or prostate cancer.

60. (New) A method for diagnosing colon, breast or prostate cancer comprising detecting differential expression of cytochrome B5 in a patient sample, wherein differential expression of cytochrome B5 indicates that the patient has colon, breast or prostate cancer.

61. (New) The method of claim 60 wherein evidence of differential expression is detected by measuring the level of a cytochrome B5 mRNA.

62. (New) The method of claim 61 wherein the level of the cytochrome B5 mRNA in the patient sample is compared to a control.

63. (New) The method of claim 62 wherein the control comprises normal colon, breast or prostate tissue.

64. (New) The method of claim 62 wherein the level of the mRNA in the patient sample is increased at least 200% relative to the control.

65. (New) The method of claim 60 wherein differential expression is detected by measuring the level of a cytochrome B5 expression product at least 95% identical to SEQ ID NO:869.

66. (New) The method of claim 60 wherein differential expression is detected by measuring the level of a cytochrome B5 expression product at least 98% identical to SEQ ID NO:869.

67. (New) The method of claim 60 wherein differential expression is detected by measuring the level of a cytochrome B5 expression product comprising SEQ ID NO:869.

68. (New) A method of diagnosing colon, breast or prostate cancer in a patient comprising:

(a) contacting a polynucleotide that hybridizes under highly stringent conditions to a nucleotide sequence comprising SEQ ID NO:869 with nucleic acids of a patient colon, breast or prostate sample under binding conditions suitable to form a duplex; and

(b) comparing the amount of the duplex formed to the amount of duplex formed when the polynucleotide is contacted with nucleic acids of a normal, non-cancerous control,

wherein increased levels of the amount of duplex formed upon contacting said polynucleotide with said nucleic acids of the patient sample compared to the amount of duplex formed upon contacting said polynucleotide and said nucleic acids of the normal non-cancerous control is indicative of the presence of prostate cancer, colon cancer, stomach cancer or breast cancer in said patient; and wherein hybridization is performed at 60°C in 5 X SSC (9 mM saline /0.9 mM sodium citrate.

69. (New) A method of diagnosing colon, breast or prostate cancer in a patient, said method comprising detecting in a patient sample the level of expression of an mRNA having a sequence at least 95% identical to the nucleotide sequence set forth in SEQ ID NO:869, or the complement thereof, wherein an increase between the level of expression of said mRNA in said patient sample relative to the level of expression of said mRNA in a control sample indicates said patient has colon, breast or prostate cancer.

70. (New) The method of claim 69, said mRNA comprising a nucleotide sequence at least 98% identical to SEQ ID NO:869.

71. (New) The method of claim 69, said mRNA having the nucleotide sequence set forth in SEQ ID NO:869.

72. (New) A method for diagnosing colon, stomach, or breast cancer in an individual, said method comprising:

a) determining the expression of a nucleic acid having the nucleotide sequence set forth in SEQ ID NO:869 in a colon, stomach, or breast tissue sample from said individual; and

b) comparing said expression of said nucleic acid from a control colon, stomach, or prostate tissue sample; wherein an increase in said expression indicates that said individual has colon, stomach, or breast cancer.

73. (New) A method of diagnosing colon, breast or prostate cancer comprising:

a) determining the level of an expression product at least 95% identical to the nucleotide sequence set forth in SEQ ID NO:869, or the complement thereof, in a patient colon, breast or prostate sample; and

b) comparing said level of the expression product in (a) to a level of the expression product in a second sample, said second sample comprising a normal colon, breast or prostate sample, wherein an increase between the level of the expression product in (a) and the level of the expression product in the second sample indicates that the patient has colon, breast or prostate cancer.